

Silphin-1-ene

Inchi: InChI=1S/C15H24/c1-11-6-7-12-13(2,3)10-14(4)8-5-9-15(11,12)14/h5,9,11-12H,6-8,10H2
InchiKey: VHIA MHVUKUKCHP-CTHBEMJXSA-N
Formula: C15H24
SMILES: CC1CCC2C(C)(C)CC3(C)CC=CC123
Mol. weight [g/mol]: 204.35

Physical Properties

Property code	Value	Unit	Source
gf	231.54	kJ/mol	Joback Method
hf	-84.03	kJ/mol	Joback Method
hfus	9.28	kJ/mol	Joback Method
hvap	45.29	kJ/mol	Joback Method
log10ws	-4.43		Crippen Method
logp	4.415		Crippen Method
mcvol	185.330	ml/mol	McGowan Method
pc	2239.76	kPa	Joback Method
rinpol	1329.00		NIST Webbook
rinpol	1351.00		NIST Webbook
rinpol	1348.00		NIST Webbook
rinpol	1340.00		NIST Webbook
rinpol	1348.00		NIST Webbook
rinpol	1348.00		NIST Webbook
rinpol	1339.00		NIST Webbook
rinpol	1340.00		NIST Webbook
ripol	1474.00		NIST Webbook
ripol	1474.00		NIST Webbook
ripol	1474.00		NIST Webbook
ripol	1474.00		NIST Webbook
tb	561.90	K	Joback Method
tc	795.76	K	Joback Method
tf	369.57	K	Joback Method
vc	0.709	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	501.64	J/mol×K	561.90	Joback Method
cpg	524.98	J/mol×K	600.88	Joback Method
cpg	546.53	J/mol×K	639.85	Joback Method
cpg	566.74	J/mol×K	678.83	Joback Method
cpg	586.06	J/mol×K	717.81	Joback Method
cpg	604.93	J/mol×K	756.78	Joback Method
cpg	623.79	J/mol×K	795.76	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R411817&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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